

State Planning and Research Program Quarterly Report

PROJECT TITLE: *Standardized Test Procedures for Ice Melting Capacity of Deicers*

OBJECTIVES: The goal of this research is to evaluate the suitability of the mechanical rocker test as “a standardized laboratory test that can realistically and robustly assess the performance of deicers is needed to allow DOTs to make data-driven procurement decisions.”

PERIOD COVERED:

July 1, 2020 – Sept. 30, 2020

PARTICIPATING AGENCIES:

Washington State University – Prime
Monte Vista Associates LLC – Subcontractor
Roadtech, Inc. - Subcontractor

PROJECT MANAGER:

Debbie Sinclair / Tom Peters

LEAD AGENCY: MnDOT

PRINCIPAL INVESTIGATOR:

Xianming Shi, Ph.D., P.E.,
Washington State University

SP&R PROJECT NO:

MnDOT Contract No.
1033080

Federal Project Number:
TPF-5(353)

PROJECT IS:

☐ Planning
☒ Research & Development

ANNUAL BUDGET:

\$74,086

PROJECT EXPENDITURES TO DATE:

\$13,558

WORK COMPLETED:

Project Management

COVID-19 and associated lockup during the last quarter have continued to slow down the progress in this project.

Task 1. Mechanical Rocker Test Procedure Evaluation (40% complete). The project team worked with the panel members to finalize the list of liquid deicers of interest for testing. We have received all seven liquid deicer samples and have completed half of the laboratory testing thus far. For the Round Robin Test program, we have identified three peer labs and shipped them these liquid deicer samples along with the test protocol for them to follow.

We continued to analyze the data received from the previous Nebraska DOT projects related to the Mechanical Rocker Test.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

Work in the coming quarter will consist of project management as well as the continuation of Task 1 and the beginning of Task 2 (Interim Report).

STATUS AND COMPLETION DATE:

Partially due to the one-month delay in contract approval and Coronavirus outbreak and subsequent lock-down of campus etc., we anticipate task delays by a few months. We plan to request a no-cost time extension of six months in Oct. 2020, which would have the schedule revised as follows:

Task	Current Task Start Date	Current End Date for Task Approval	Revised Task Start Date	Revised Due Date to Submit Draft Deliverables	Revised End Date for Task Approval
1	02/01/2020	08/31/2020	02/01/2020	01/31/2021	03/31/2021
2	07/01/2020	10/31/2020	11/01/2020	02/28/2021	04/30/2021
3	10/01/2020	12/31/2020	02/01/2021	03/31/2021	05/30/2021
4	10/01/2020	03/31/2021	02/01/2021	07/30/2021	09/30/2021
5	12/01/2020	04/30/2021	05/01/2021	08/30/2021	10/30/2021
6	04/01/2021	07/31/2021	08/01/2021	11/30/2021	01/31/2022
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